

UNITED STATES PATENT AND TRADEMARK OFFICE  
Before the Board of Patent Appeals and Interferences

In re Application of: Frank Joerdens et al.  
Application Number: 10/550,219  
Filing Date: 05/19/2006  
Group Art Unit: 1766  
Examiner: Shane Fang  
Title: VITREOUS PRINGING BY MEANS OF A SILK SCREEN  
PROCESS

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Commissioner for Patents  
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Alexandria, VA 22313-1450

**REPLY BRIEF**

This is in reply to the Examiner's Answer mailed November 15, 2010.

In the "Response to Argument" section of the Examiner's Answer, the Examiner has argued separately for each of the rejections. The Examiner's comment in "Ground (A)" relates to the anticipation rejection and the Examiner's comment in "Ground (B)" relates to the obviousness rejection. Each of these grounds is addressed individually by Appellant below.

**Ground (A) - Regarding the Anticipation Rejection**

In the "Response to Argument" section of the Examiner's Answer, the Examiner contends that claims 21-38 and 41-42 are anticipated by Kalleder (WO01/23190, translation provided by U.S. 6,863,923). To support this rejection, the Examiner continues to conclude that "Kalleder disclosed enamel-free paste and also a paste contains no alcohol with bp° substantially below 100°C." See, Examiner's Answer, page 7, lines 2-3. To support this conclusion, the Examiner continues to assert

“As set for the in above ¶12, the removal of ethanol by product is carried out via rotary evaporator and roll mill, and water and/or alcohols with bp° would be inherently lower than 5% after paste making process of roll milling, so water and/alcohol would not be part of the disclosed composition.” See, Examiner’s

Answer, page 8, lines 1-4.

This is an improper standard for asserting an anticipation rejection.

The Examiner’s statements do not support the Examiner’s conclusions. The Examiner concluded that Kalleder disclosed “no alcohol with bp° substantially below 100°C.” However, the only support the Examiner provided is that Kalleder’s composition would have an alcohol content “inherently lower than 5%.”

Appellants respectfully assert that the Examiner used an improper standard in maintaining an anticipation rejection because “inherently lower than 5%” is not “no alcohol.” Appellants’ independent claims 21, 30 and 38 each recite “no alcohol with a boiling point of substantially below 100°C.” Therefore, this feature is in every claim under appeal either by direct recitation or by dependency on an independent claim. The Examiner has not asserted that Kalleder has literally disclosed a composition with no alcohol with a boiling point of substantially below 100°C. At best, the Examiner has asserted, based on his scientific judgment, Kalleder implicitly disclosed a composition that contains alcohol and/or water at less than 5%. A composition with alcohol of, for example, 4.9 percent would be considered to be wet with alcohol. The Examiner has failed in providing facts or evidence to support his conclusion that Kalleder has achieved “no alcohol with a boiling point of substantially below 100°C.”

Therefore, at least on the basis that Kalleder failed to disclose a composition with no alcohol, the anticipation rejection of claims 21-38 and 41-42 should be reversed.

Further, in arguing for maintaining the rejection, the Examiner asserts that (1) “The applicant claims ‘enamel-free’ [compositions] but does not claim ‘fully hydrolyzed and fully condensed [compositions]’ and (2) Appellants “has argued the independent claims are directed to a fully 100% hydrolyzed and condensed composition, while Kalleder discloses 20-80% degree of condensation ...” However, the Examiner further states and admits that the disclosed 20-80% refers to the hydrolysis plus condensation of silanes, not the overall reaction or the curing of overall composition.” Appellants note that the claims refer to 100% hydrolyzed and condensed compositions because they recite that a byproduct of hydrolysis and condensation, alcohol, is absent. Since a byproduct of hydrolysis and condensation is absent, it follows that hydrolysis and condensation is complete. Furthermore, the Examiner has admitted, at least, that Kalleder relates to 20-80% condensation of silanes. Since silanes are a part of Kalleder’s compositions, the fact that a part of Kalleder’s composition is not fully hydrolyzed and condensed indicates that Kalleder’s compositions contain, in fact, components that are not fully hydrolyzed and condensed. Since Kalleder’s composition comprise at least one component that is not fully hydrolyzed and condensed, Kalleder’s composition cannot be fully hydrolyzed and condensed. For this reason, the Examiners statement that 20-80% refers to the hydrolysis plus condensation of silanes actually further confirm Appellant’s position that Kalleder’s composition are not fully hydrolyzed and condensed and cannot anticipate the claims under appeal.

Therefore, at least on the basis that Kalleder failed to disclose a fully hydrolyzed and condensed composition because at least one component of the composition is not fully

hydrolyzed and condensed, the anticipation rejection of claims 21-38 and 41-42 should be reversed.

Appellants have presented two separate and independent bases above for reversing the anticipation rejection of claims 21-38 and 41-42. This anticipation rejection should be reversed if one of the bases of rejection is meritorious.

Ground (B) - Regarding the Obviousness Rejection

In the “Response to Argument” section of the Examiner’s Answer, the Examiner contends that claims 39-40 are obvious in view of a combination of Kalleder (WO01/23190, translation provided by U.S. 6,863,923) as evidenced by Yoshida (U.S. 5,667,888) and Levasil (H.C. Stark product list, 09/2006) for two reasons. In the Appeal Brief, Appellants argued that since Kalleder, Yoshida and Levasil failed to render independent claim 38 obvious, claims 39-40 cannot be obvious because they depend on claim 38. In the Examiner’s answer, the Examiner alleged that since Kalleder as evidenced by Yoshida and Levasil meet claim 38 and that an obviousness rejection is justified.

As stated in the Appeal Brief and above, claim 38 is not obvious at least because it recites “no alcohol with a boiling point of substantially below 100°C” and that the Examiner has not shown that Kalleder has achieved this feature of the claims. The Examiner once again repeats, in the “Ground (B)” section of the “Response to Argument,” that:

“As set for the in above ¶2, the removal of ethanol by product is carried out via rotary evaporator and roll mill, and water and/or alcohols with bp° would be inherently lower than 5% after paste making process of roll milling, so water and/alcohol would

not be part of the disclosed composition.” See, Examiner’s Answer, page 10, lines 1-4.

Appellants note that the Examiner indicated in the middle part of the sentence that water and alcohol would be inherently lower than 5%. Then, without further explanation, the Examiner jumps to the unsupported conclusion that since water and alcohol is inherently lower than 5%, water and alcohol would not be part of Kalleder’s composition. The Examiner further concludes that therefore, claims 39-49, which contains the feature of “no alcohol with a boiling point of substantially below 100°C”, are obvious.

Appellants respectfully assert that this is an erroneous conclusion. One cannot assume that because one component (e.g., alcohol) is inherently less than 5% that it also implies “water and/alcohol would not be part of the disclosed composition.” Appellants note that the text of Kalleder did not state that water/alcohol is less than 5% or that “water and/alcohol would not be part of the disclosed composition.” These conclusions that: (1) Kalleder’s composition’s water/alcohol content is less than 5%; or that (2) water and/alcohol would not be part of Kalleder’s composition; are mere conjectures of the Examiner. Furthermore, the Examiner did not provide any reasoning to support his unscientific conclusion that since a product produced from a rotary evaporator and roll mill has less than 5% alcohol/water would lead to a conclusion that alcohol/water is not part of the composition. For example, less than 5% could mean 4%. A conclusion that “water and/alcohol would not be part of the disclosed composition” cannot be drawn for a composition that has 4% water/alcohol.

The Examiner further notes that “It has been found that where claimed ranges overlap ranges disclosed by the prior art, a prima facie case of obviousness exists - see MPEP 2144.05.” See, Examiner’s Answer, page 9, lines 11-12. Appellants note that this sentence does not apply

in the present case because Kalleder did not disclose a range for water and alcohol. The Examiner's statement "water and/or alcohols with bp° would be inherently lower than 5% after paste making" is entirely the Examiner's conjecture. This point is not found in the cited references. Therefore, this cannot be considered a range disclosed by the prior art. The Examiner has not presented any evidence that Kalleder has achieved a paste with less than 5% water or alcohol. It is even more unreasonable to conclude, as the Examiner did, that Kalleder has achieved a paste of "no alcohol" as featured in the pending claims. A process that can reduce alcohol to 5% is significantly different from a process that reduces alcohol to the state of "no alcohol."

Therefore, at least on the basis that Kalleder failed to disclose or render obvious a composition with no alcohol and "no alcohol" is a feature of claims 39-40 as discussed above, the obviousness rejection of claims 39-40 should be reversed.

Respectfully submitted,

/James E. Howard/

James E. Howard  
Registration No. 39,715  
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BSH Home Appliances Corporation  
100 Bosch Blvd.  
New Bern, NC 28562  
Phone: 252-639-7644  
Fax: 714-845-2807  
james.howard@bshg.com